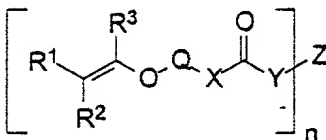


We Claim:

1. A die attach adhesive comprising
- (a) 5 to 30 weight percent of a mixture of a vinyl ether compound
- 5 containing polar functionality and an electron acceptor compound,
- (b) 0.01 to 10.0 weight percent of a free-radical initiator or photoinitiator,
- (c) 70 to 95 weight percent of a conductive or nonconductive filler,
- to a total of 100 weight percent,
- 10 in which the vinyl ether has the structure



in which

n is 1 to 6;

R¹, R², and R³ are hydrogen, methyl or ethyl;

- 15 Q is an alkyl or cycloalkyl linear or branched chain having 1 to 12 carbon atoms; an alkylenoxy chain having 1 to 12 carbon atoms, or aromatic or fused aromatic ring having 3 to 10 carbon atoms and optionally containing the heteroatoms O, N or S;

- X and Y are independently O, NR¹, or S, with the proviso that both X
- 20 and Y cannot be oxygen or sulfur;

Z is a branched or linear alkane, which may contain cyclic moieties, a siloxane, a polysiloxane, a C₁ to C₄ alkoxy-terminated siloxane or polysiloxane, a polyether, a polyester, a polyurethane, a poly(butadiene), or an aromatic, polyaromatic, or heteroaromatic group.

2. The die attach adhesive according to claim 1 in which

R^1 , R^2 , and R^3 are hydrogen,

Q is a linear or branched chain alkyl having 1 to 12 carbon atoms;

and

5 Z is a linear or branched chain alkyl having up to 36 carbon atoms.

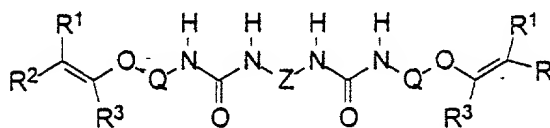
3. The die attach adhesive according to claim 1 in which the filler is a
conductive filler.

10 4. The die attach adhesive according to claim 3 in which the filler is
silver.

5. The die attach adhesive according to claim 1 in which the filler is
tetrafluoroethylene.

15

6. A vinyl ether compound having the structure:



20 in which

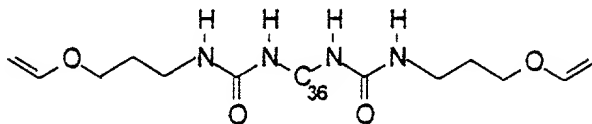
R^1 , R^2 , and R^3 are independently hydrogen, a methyl group, or an
ethyl group;

Q is an alkyl or alkylenoxy linear or branched chain having 1 to 12
carbon atoms;

25 Z is a branched or linear alkane, which may contain cyclic moieties, a
siloxane, a polysiloxane, a C_1 to C_4 alkoxy-terminated siloxane or

polysiloxane, a polyether, a polyester, a polyurethane, a poly(butadiene), or an aromatic, polyaromatic, or heteroaromatic group.

7. The vinyl ether compound according to claim 5 having the structure



in which C₃₆ is a mixture of isomers of a 36 carbon linear or branched chain.

8. An adhesive composition containing the vinyl ether compound according to claim 5, a free radical initiator or photoinitiator, and optionally a
- 10 conductive or nonconductive filler.

- $$\begin{array}{c} \text{R}^1 \quad \text{H} \quad \text{H} \quad \text{H} \quad \text{H} \quad \text{R}^1 \\ | \quad | \quad | \quad | \quad | \quad | \\ \text{R}^2 - \text{C} = \text{C} - \text{O} - \text{N} - \text{C}(=\text{O}) - \text{N} - \text{Z} - \text{N} - \text{C}(=\text{O}) - \text{N} - \text{O} - \text{C} = \text{C} - \text{R}^2 \\ | \quad | \quad | \quad | \quad | \quad | \\ \text{R}^3 \quad \text{O} \quad \text{O} \quad \text{O} \quad \text{O} \quad \text{O} \end{array}$$

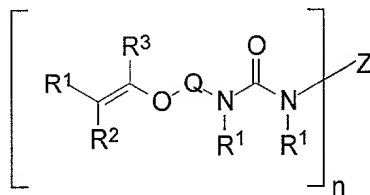
R¹, R², and R³ are independently hydrogen, a methyl group, or an ethyl

Z is a branched or linear alkane, which may contain cyclic moieties, a siloxane, a polysiloxane, a C₁ to C₄ alkoxy-terminated siloxane or polysiloxane, a polyether, a polyester, a polyurethane, a poly(butadiene), or an aromatic, polyaromatic, or heteroaromatic group.

- C=CCOCCNC(=O)NC(=O)NC(=O)NC(=O)NCCCOCC=C

in which C_{36} is a mixture of isomers of a 36 carbon linear or branched chain.

9. A vinyl ether compound having the structure:



in which

n is 1 to 6;

R¹, R², and R³ are hydrogen, methyl or ethyl;

Q is an alkyl or cycloalkyl linear or branched chain having 1 to 12 carbon atoms; an alkylenoxy chain having 1 to 12 carbon atoms, or aromatic or fused aromatic ring having 3 to 10 carbon atoms and optionally containing the heteroatoms O, N or S;

Z is a branched or linear alkane, which may contain cyclic moieties, a siloxane, a polysiloxane, a C₁ to C₄ alkoxy-terminated siloxane or polysiloxane, a polyether, a polyester, a polyurethane, a poly(butadiene), or an aromatic, polyaromatic, or heteroaromatic group.